

REMARKS

In the specification, the "Cross Reference to Related Applications" paragraph is added to the beginning.

The examiner rejects claim 2-10 and 13-20 "under 35 U.S.C. 112, second paragraph, as being indefinite... Claims 2, 5, 8, 13, 16, and 19 are indefinite because it is unclear which plane is being referred to by the limitation 'the plane at the center of rotation of the pulley (or pivot bearing)'. There are an infinite number of planes at the center of rotation of the pulley, such as a horizontal plane and a vertical plane. For this office action a vertical plane will be used as the plane at the center of rotation of the pulley or pivot bearing." The "plane at the center of rotation" is a defined term within the specification at page 1 lines 25-26. However, "vertical" appears nowhere within the application and is not a natural tenant of the application.

The applicant believes that there is only plane that fits the definition. Accordingly, this usage does not render the claims unclear or indefinite. However, it is recognized that more common usage might be to specify the plane in question as the plane of rotation at the center of the pulley. The use of vertical, however, would be unclear. Claims 2, 5, 13 and 16 are amended to refine the term of the recited plane as "the plane of rotation at the center of said pulley". Claim 8 and 19 depend from claims 5 and 16, respectively, and thus include this clarification.

The examiner goes on to state "[c]laims 3, 7, 14, and 18 recite the limitation 'said strut attachment' in line 1. There is insufficient antecedent basis for this limitation in the claim." Claims 1 and 12, from which claims 3 and 7 and claims 14 and 18 depend, respectively, includes "an attachment point for a strut". It is submitted that "said strut attachment" finds all necessary antecedent there from. However, in the spirit of cooperation claims 3, 7, 14, and 18 are amended to include the word "point" after "said strut attachment" to satisfy the examiner's concern. It is believed that all claim rejections under 35 USC 112 have been accommodated and overcome.

The Examiner states: "Claims 1-3 and 5-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmid (US 6,039,664)... Schmid discloses an improved power transmission belt tensioner of the type having a pulley (3) adapted to communicate with a surface of a power transmission belt, an arm (2) supporting said pulley upon which said pulley is rotatably mounted via a pulley bearing (see Fig 2), a shaft (5) supporting said arm, said shaft rotatably supported by a pivot bearing (13), an attachment point (see Fig 2) for a strut (1), and said strut attached to said attachment point (see Fig 2), the improvement comprising: said pulley (right side) and said attachment point (left side) laterally offset in relation to said pivot bearing and **substantially balanced in terms of parasitic torque across said pivot bearing** (It is inherent that the forces of the strut would balance out the forces of the pulley, because as the belt applies more force against the pulley the strut would apply an equal opposite force in order to keep tension on the belt. The forces of the pulley and the strut have to pass through the pivot bearing and balance in order to keep the appropriate tension on the belt)." (emphasis added)

The elimination of parasitic torque across the pivot bearing in a tensioner using the beneficial properties of a strut biasing member and offset to accommodate certain power transmission accessory belt drive system geometries goes to the heart of the invention. (see page 1 lines 6-9) Further, parasitic torque, a twisting force tending to change axial alignment of the pivot bearing, is defined and discussed in exquisite detail in the specification at page 5 line 5 through page 7 line 19 and accompanied by figure 4. It is the force that tends to cause uneven wear along the axis the pivot bearing.

Schmid is completely devoid of any reference to or discussion of parasitic torque or any equivalent. The tensioner disclosed is not balanced in terms of parasitic torque, and would suffer from parasitic torque. Accordingly, Schmid does not disclose, teach, or even suggest that a tensioner should or even could be balanced in terms of parasitic torque across a pivot bearing. As this element is missing from the disclosure of Schmid, Schmid does not disclose every element of claim 1, and therefore cannot be held to anticipate claim 1.

It is submitted that claim 1 is in condition for allowance. Claims 2-11 depend from claim 1. Likewise it is submitted that they are in condition for allowance.

The Examiner states: ". Claims 12-14 and 16-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Mutoh et al (DE 3809169). Mutoh et al disclose a power transmission drive comprising; a crankshaft pulley (1); an accessory pulley (3); a power transmission belt (5); a power transmission belt tensioner having a tensioner pulley (6) adapted to communicate with a surface of said power transmission belt (see Fig 1), an arm (7) supporting said tensioner pulley upon which said tensioner pulley is rotatably mounted via a pulley bearing (9), a shaft (10) supporting said arm, said shaft rotatably supported by a pivot bearing (unnumbered, see Fig 2), an attachment point (unnumbered, see Fig 1) for a strut (21), and said strut attached to said attachment point (at 28), said pulley and said attachment point laterally offset in relation to said pivot bearing (see Fig 2) and **substantially balanced in terms of parasitic torque across said pivot bearing** (It is inherent that the forces of the strut would balance out the forces of the pulley, because as the belt applies more force against the pulley the strut would apply an equal opposite force in order to keep tension on the belt. The forces of the pulley and the strut have to pass through the pivot bearing and balance in order to keep the appropriate tension on the belt) and, said power transmission belt trained about said crankshaft pulley, said accessory pulley and said tensioner pulley (see Fig 1)." (emphasis added)

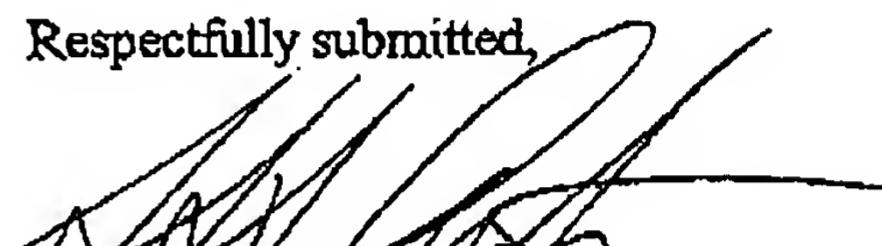
The elimination of parasitic torque across the pivot bearing in a tensioner using the beneficial properties of a strut biasing member and offset to accommodate certain power transmission accessory belt drive system geometries goes to the heart of the invention. (see page 1 lines 6-9) Further, parasitic torque is defined and discussed in exquisite detail in the specification at page 5 line 5 through page 7 line 19 and accompanied by figure 4.

Like Schmid, Mutoh is completely devoid of any reference to or discussion of parasitic torque or any equivalent. The tensioner disclosed is not balanced in terms of parasitic torque, and would suffer from parasitic torque. Accordingly, Mutoh does not disclose, teach, or even suggest that a tensioner should or even could be balanced in terms of parasitic torque across a pivot bearing. As this element is missing from the disclosure of Mutoh, Mutoh does not disclose every element of claims 12 or 22, and therefore cannot be held to anticipate claims 12 or 22.

It is submitted that claims 12 and 22 are in condition for allowance. Claims 13-21 depend from claim 12. Likewise it is submitted that they are in condition for allowance.

In light of the foregoing amendments and remarks, allowance of all claims is respectfully solicited. If issues remain and the Examiner feels that it would expedite prosecution, the examiner is urged to call the undersigned.

Respectfully submitted,



Steven G. Austin  
Attorney for the Applicants  
Reg. No. 34,541  
The Gates Corporation  
IP Law Department 10-A3  
1551 Wewatta Street  
Denver, CO 80202  
(303) 744-5796

SGA  
Denver, Colorado